REMARKS

Claims 1-42 were pending at the time of the Office Action. Claims 5, 8-19, and 23-42 stand withdrawn from consideration as being drawn to non-elected subject matter. Claims 1, 6, 7, and 22 stand rejected for obviousness-type double patenting over claims 2-17 of U.S. Patent No. 6,221,840 and claim 7 of U.S. Patent No. 6,063,755. Claims 1, 6, 7, and 20-22 stand rejected for obviousness-type double patenting over claims 1-7 of U.S. Patent No. 6,525,018. Claims 1-4, 6, 7, and 20-22 stand provisionally rejected for obviousness-type double patenting over claims 1 and 6-13 of U.S. Application No. 10/235,238; claims 1-27of U.S. Application No. 10/266,069; claims 1-5 and 7-33 of U.S. Application No. 10/305,747; claims 1, 3-7, and 10-21 of U.S. Application No. 10/313,642; claims 7-18 of U.S. Application No. 10/353,334; claims 12-15, 17, 23-25, and 27-35 of U.S. Application No. 10/397,953; claims 1-23 of U.S. Application No. 10/431,805; claims 1-22 and 38-58 of U.S. Application No. 10/434,607; claims 1-21 of U.S. Application No. 10/434,636; claims 1-4, 6, 11-21, and 41-51of U.S. Application No. 10/434,752; claims 1-21 and 38-51 of U.S. Application No. 10/435,406; claims 1-6, 9, 10, 13, and 14 of U.S. Application No. 10/449,456; claims 1-21 of U.S. Application No. 10/457,157; and claims 2-10 of U.S. Application No. 11/275,599. All claims stand provisionally rejected for conflicting with numerous claims of U.S. Application Nos. 10/235,238; 10/266,069; 10/305,747; 10/313,642; 10/353,334; 10/397,953; 10/431,805; 10/434,636; 10/434,752; 10/435,406; 10/449,456; and 10/457,157. Claims 1-4, 6, 7, and

20-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description and enablement requirements. Claims 2-4 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 1-4, 6, 7, and 20-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by International Application Publication No. WO 97/38712. Claims 1, 6, 7, and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,063,755. Applicants address each of these rejections below.

Claim Amendments

Claim 1 has been amended to recite specified fragments of human intestinal trefoil factor (hITF) and to recite SEQ ID NO: 1. Support for this amendment is found, e.g., on page 11, lines 7-10, and in claim 2 as filed. Claim 2 has been amended to feature glutamate-alanine-$hITF_{15-73}$ (EA-$hITF_{15-73}$). Support for this amendment is found, e.g., on page 35, lines 11-16. Claims 3-6 and 23-42 have been cancelled. Claims 7, 8, 10, 13, 15, 16, 18, 20, and 22 have been amended to depend from claim 1 or 2. Claims 9 and 20 have been amended to correct minor typographical errors.

The present amendments were made to expedite prosecution, and applicants reserve the right to pursue any cancelled subject matter in this or in a continuing application. No new matter has been added.

Double Patenting Rejections

Claims 1, 6, 7, and 22 stand rejected for obviousness-type double patenting over claims 2-17 of U.S. Patent No. 6,221,840 and claim 7 of U.S. Patent No. 6,063,755. Claims 1, 6, 7, and 20-22 stand rejected for obviousness-type double patenting over claims 1-7 of U.S. Patent No. 6,525,018. Claims 1-4, 6, 7, and 20-22 stand provisionally rejected for obviousness-type double patenting over claims 1 and 6-13 of U.S. Application No. 10/235,238; claims 1-27of U.S. Application No. 10/266,069; claims 1-5 and 7-33 of U.S. Application No. 10/305,747; claims 1, 3-7, and 10-21 of U.S. Application No. 10/313,642; claims 7-18 of U.S. Application No. 10/353,334; claims 12-15, 17, 23-25, and 27-35 of U.S. Application No. 10/397,953; claims 1-23 of U.S. Application No. 10/431,805; claims 1-22 and 38-58 of U.S. Application No. 10/434,607; claims 1-21 of U.S. Application No. 10/434,636; claims 1-4, 6, 11-21, and 41-51of U.S. Application No. 10/434,752; claims 1-21 and 38-51 of U.S. Application No. 10/435,406; claims 1-6, 9, 10, 13, and 14 of U.S. Application No. 10/449,456; claims 1-21 of U.S. Application No. 10/457,157; and claims 2-10 of U.S. Application No. 11/275,599. Applicants respectfully request that the provisional rejections be temporarily held in abeyance until such time as otherwise-allowable subject matter is identified.

All claims stand provisionally rejected for conflicting with numerous claims of U.S. Application Nos. 10/235,238; 10/266,069; 10/305,747; 10/313,642; 10/353,334; 10/397,953; 10/431,805; 10/434,636; 10/434,752; 10/435,406; 10/449,456; and

10/457,157. As indicated above, the present claims have been amended to feature specified fragments of hITF that are not recited in the claims of the allegedly conflicting applications. As such, this rejection may be withdrawn.

Rejections Under 35 U.S.C. § 112, First Paragraph

Written description

Claims 1-4, 6, 7, and 20-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants disagree; however, to expedite prosecution, this rejection has been addressed by amendment. The claims, as amended, feature only a small number of clearly-defined polypeptide sequences. The presently pending claims are well-supported by the written description of the specification. Accordingly, the written description rejection should be withdrawn.

Enablement

Claims 1-4, 6, 7, and 20-22 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Applicants disagree. However, as noted above, to expedite prosecution, the claims have been amended to feature only a small number of clearly-defined intestinal trefoil factor sequences, each of which has biological activity (see, e.g., page 26, lines 4-12, and page 35, lines 10-16, of the specification as filed). No experimentation whatsoever is required to identify appropriate

molecules for use in the claimed methods, as these molecules are already identified in the claims.

Furthermore, practicing any of the claims, as amended, is straightforward. The presently-claimed methods require nothing more than the administration of one of a small number of hITF fragments to a mammal in order to treat or prevent an epithelial lesion. Such administration of a pre-defined polypeptide does not require undue experimentation. While there is no guarantee that every single epithelial lesion will be cured by an hITF fragment, it is evident that many such lesions can at least be treated or prevented with an hITF fragment regimen. An entirely inoperative embodiment would have to exhibit no detectable therapeutic effect whatsoever for any patient receiving the hITF fragment therapy, as the claims require only treatment or prevention, not curing, of the epithelial lesion; furthermore, there is no requirement that all claimed embodiments be operative (M.P.E.P. § 2164.03). Thus, it is not necessary to predict in advance which lesions are likely to be cured by ITF treatment. Rather, it is only necessary to predict that the hITF fragments recited in the claims can be used to treat or prevent epithelial lesions at least to some extent – a reasonable prediction, in view of the teachings of the specification and hITF's known activity throughout the body, including the gastrointestinal system and the eye.

Applicants also direct the Office's attention to M.P.E.P. § 2164.04, which cites *In re Marzocchi* (169 U.S.P.Q. 367, 370 (C.C.P.A. 1971)):

> [I]t is incumbent upon the Patent Office, whenever a rejection on this basis is

> made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure.

The Office has not provided evidence or reasoning to contradict the teachings of the specification or to show that undue experimentation would be required to practice the claimed invention. Indeed, there is nothing in the references cited by the Office, including Rio et al. (Science 241:705-708, 1998), Goldenring et al. (U.S. Application Publication No. 20020187487), Gerhold et al. (BioEssays 18:973-981, 1996), Well et al. (Journal of Leukocyte Biology 61:545-550, 1997), Russell et al. (Journal of Molecular Biology 244:332-350, 1994), Attwood (Science 290:471-473, 2000), Rudinger et al. ("Peptide Hormones," ed. Parsons, J.A., University Park Press p. 6, 1976), Burgess et al. (The Journal of Cell Biology 111:2129-2138, 1990), Lazar et al. (Molecular and Cellular Biology 8:1247-1252, 1988), Kinoshita et al. (Molecular and Cellular Biology 20:4680-4690, 2000), Burling et al. (American Journal of Veterinary Research 61:1150-1155, 2000), May et al. (Biochemistry 42:8250-8259, 2003), Ngo et al. (The Protein Folding Problem and Tertiary Structure Prediction, pp. 492-495, 1994), Mason et al. (Molecular Endocrinology 8:325-332, 1994), Silva et al. (J. Pathology 190:133-142, 2000), Nikolaidis et al. (American J. Respiratory Cell and Molecular Biology 29:458-464, 2003), Juhasz et al. (Immunology Letters 52:125-128, 1996), Yoo et al. eds. (Gastrointestinal Mucosal Repair and Experimental Therapeutics, Front. Gastrointest. Res. Basel, Karger

25:14-28, 2002), Modlin et al. (J. Clin. Gastroenterol. 25:S94-S100, 1997), Tesfaigzi (Arch. Immunol. Ther. Exp. 51:283-288, 2003), Moss et al. (Yale Journal of Biology and Medicine 69:155-158, 1997), McKenzie et al. (Aliment Pharmacol. Ther. 14:1033-1040, 2000), Oertel et al. (American Journal of Respiratory Cell and Molecular Biology 25:418-424, 2001), and Cook et al. (Journal of Gastroenterology and Hepatology 13:363-370, 1998), to provide reason to doubt the teachings of the specification. Thus, the Office has not met its burden, under the standard provided in *Marzocchi*, of "back[ing] up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement."

For all of the above reasons, claims 1-4, 6, 7, and 20-22, are enabled. The burden is on the Office to provide a detailed, reasoned explanation for the rejection of each claim. It is applicants' understanding that the Office will either provide a rebuttal for each of applicants' assertions of enablement of each claim or will withdraw the enablement rejection in view of the clarifications that have been provided during prosecution.

In view of the above arguments and the present claim amendments, the enablement rejection should be withdrawn.

Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 2-4 stand rejected under 35 U.S.C. § 112, second paragraph, as indefinite.

This rejection has been addressed by amendment and should be withdrawn.

Rejections Under 35 U.S.C. § 102(b)

Claims 1-4, 6, 7, and 20-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by International Application Publication No. WO 97/38712 ("the '712 publication"). In addition, claims 1, 6, 7, and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,063,755 ("the '755 patent"). Neither that '712 publication nor the '755 patent teach or suggest the specified fragments featured in the claims, as amended. Accordingly, the rejections for anticipation should be withdrawn.

Withdrawn Claims

Claims 8-19 stand withdrawn as drawn to non-elected species. Upon allowance of generic claims 1 and 2, applicants respectfully request that claims 8-19, which depend from claim 1 or 2, be examined and allowed.

CONCLUSION

Applicants submit that the claims are in condition for allowance, and such action is respectfully requested. Enclosed is a Petition to extend the period for replying to the Office Action for three months, to and including December 17, 2007, as December 15, 2007 is a Saturday.

If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

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James D. DeCamp, Ph.D.
Reg. No. 43,580

Clark & Elbing LLP
101 Federal Street
Boston, MA 02110
Telephone: 617-428-0200
Facsimile: 617-428-7045